

SRO 09/51

kV dependent max mA values for exposure times $\leq 100\text{ms}$ in combination with Optimus 50kW

kV	SF [μA]	LF [μA]	kV	SF [μA]	LF [μA]	kV	SF [μA]	LF [μA]	kV	SF [μA]	LF [μA]
40	50000	338000	70	99000	650000	100	90000	500000	130	69230	384615
41	52000	351000	71	100200	650000	101	89108	495049	131	68702	381679
42	54000	364000	72	101400	650000	102	88235	490196	132	68181	378787
43	56000	377000	73	102600	650000	103	87378	485436	133	67669	375939
44	58000	390000	74	103800	650000	104	86538	480769	134	67164	373134
45	60000	403000	75	105000	650000	105	85714	476190	135	66666	370370
46	61800	416000	76	106500	650000	106	84905	471698	136	66176	367647
47	63600	429000	77	108000	649350	107	84112	467289	137	65693	364963
48	65400	442000	78	109500	641025	108	83333	462962	138	65217	362318
49	67200	455000	79	111000	632911	109	82568	458715	139	64748	359712
50	69000	468000	80	112500	625000	110	81818	454545	140	64285	357142
51	70600	479800	81	111111	617283	111	81081	450450	141	63829	354609
52	72200	491600	82	109756	609756	112	80357	446428	142	63380	352112
53	73800	503400	83	108433	602409	113	79646	442477	143	62937	349650
54	75400	515200	84	107142	595238	114	78947	438596	144	62500	347222
55	77000	527000	85	105882	588235	115	78260	434782	145	62068	344827
56	78600	537400	86	104651	581395	116	77586	431034	146	61643	342465
57	80200	547800	87	103448	574712	117	76923	427350	147	61224	340136
58	81800	558200	88	102272	568181	118	76271	423728	148	60810	337837
59	83400	568600	89	101123	561797	119	75630	420168	149	60402	335570
60	85000	579000	90	100000	555555	120	75000	416666	150	60000	333333
61	86600	589200	91	98901	549450	121	74380	413223			
	88200	599400	92	97826	543478	122	73770	409836			
	89800	609600	93	96774	537634	123	73170	406504			
	91400	619800	94	95744	531914	124	72580	403225			
	93000	630000	95	94736	526315	125	72000	400000			
	94200	639800	96	93750	520833	126	71428	396825			
	95400	649600	97	92783	515463	127	70866	393700			
	96600	650000	98	91836	510204	128	70312	390625			
	97800	650000	99	90909	505050	129	69767	387596			

These are the default values of the tube data file TUBE_R2.TDL or TUBE_R3.TDL.

Typically there are no changes after adaptation except there are reductions due to the max generator power (Optimus 50kW = 650mA max) or if the filament does not have its full emission anymore (e.g. from shorted filament loops).

The **red marked** emission current values (at 80kV SF and 68kV LF) are the max emission currents at a kV value from which on the filament current can be reduced to achieve its max load performance.